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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/978,046

10/17/2001

Joseph G. Barrett

06975-132002

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07/26/2006

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EXAMINER

REILLY, SEAN M

ART UNIT

PAPER NUMBER

2153

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/978,046	BARRETT ET AL.	
	Examiner	Art Unit	
	Sean Reilly	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 129-226 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 129-226 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office action is in response to Applicant's amendment and request for reconsideration filed on April 27, 2006. All previous claims have been canceled. New claims 129-226 have been added.

Response to Arguments

Applicant's sole argument is that Paul does not disclose *associating an address of a sending device with a unique identifier or a user-defined identifier*. Examiner agrees that Paul does not specifically recite such a feature. Nonetheless Examiner maintains that such a modification would have been obvious to one of ordinary skill in the art at the time of Applicant's invention. The goal of Paul's system is to append information (codes) to emails so that users of the system can discern emails as being spam based on the sender of the email. Paul disclosed adding codes to the email for this discerning (i.e. adding the code "JUNK" to identify the sender as being a JUNK sender, see inter alia Col 5, lines 34-45). Paul further disclosed that any code could be used (Col 5, lines 34-45) and that users may manually configure the filtering applications (Col 9, lines 42-57). Accordingly users could enter any codes they desire to be appended to emails that allow the email senders to be identified as spammers. As evidenced by Paul, IP addresses are a form of sender identifiers that may be used to identify spammers (Col 5, lines 10-20). Accordingly users may have used sender IP addresses for the appended code in Paul's system, as opposed to the exemplarily code "JUNK." Additionally the name of the spammer (a person) would also have been another equally applicable code users may have desired to use since a name is easily disguisable for users and thus users could easily recognize

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well known names of spammers. Thus, it would have obvious to one of ordinary skill in the art to include any code in Paul's system, such as a sender IP address or the sender name or other unique and/or user-defined identifier, since the use of such codes would have allowed users to easily identify spammers.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 129-132, 134-138, 140-143, 149-157, 159-163, 165, 167-168, 174-182, 184-188, 190, 192-193, 199-206, 208-212, 214, 216-217, 223-226, are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul (U.S. Patent Number 6,052,709).

With regard to claims 129, 132, 134, and 153, Paul disclosed a method for communicating electronic data in a manner that identifies a sender, the method comprising:

Associating an address of a sending device with an identifier that identifies a user of the sending device (e.g. associating emails senders with an exclusion list and an identifier, such as "JUNK", Col 6, lines 45-52);

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Receiving, from the sending device, an electronic message at an intermediary located between a sender and an intended recipient of the electronic message (server receives an email message for a user, Col 8, lines 19-20);

Identifying the address of the sending device based on the electronic message (Col 5, lines 10-15); and

Determining the identifier associated with the user of the sending device based on the identified address and the association between the address of the sending device and the identifier; (e.g. code for identifying a "JUNK" sender, Col 6, lines 46-52 or Col 8, lines 62-65);

Changing the electronic data to include the determined identifier (adding in the code, for instance "JUNK" Col 8, lines 62-65);

Forwarding at least a selected portion of the changed electronic data to the intended recipient (the server sends or routers the message including the display code to the user, Col 8, lines 19-21).

Paul disclosed substantial features of the claimed invention however, Paul failed to specifically recite that the identifier is unique or user defined. Nonetheless these features are not patentably distinct. The goal of Paul's system is to append information (codes) to emails so that users of the system can discern emails as being spam based on the sender of the email. Paul disclosed adding codes to the email for this discerning (i.e. adding the code "JUNK" to identify the sender as being a JUNK sender, see inter alia Col 5, lines 34-45). Paul further disclosed that any code could be used (Col 5, lines 34-45) and that users may manually configure the filtering applications (Col 9, lines 42-57). Accordingly users could enter any codes they desire to be

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appended to emails that allow the email senders to be identified as spammers. As evidenced by Paul, IP addresses are a form of sender identifiers that may be used to identify spammers (Col 5, lines 10-20). Accordingly users may have used sender IP addresses for the appended code in Paul's system, as opposed to the exemplarily code "JUNK." Additionally the name of the spammer (a person) would also have been another equally applicable code users may have desired to use since a name is easily disguisable for users and thus users could easily recognize well known names of spammers. Thus, it would have obvious to one of ordinary skill in the art to include any code in Paul's system, such as a sender IP address or the sender name or other unique and/or user-defined identifier, since the use of such codes would have allowed users to easily identify spammers.

With regard to claim 130, Paul further disclosed that the sender is a client device (i.e. the sender is just a regular e-mail sender).

With regard to claims 131, Paul further disclosed the sender identifier comprise a screen name (i.e. "JUNK" is a display identifier).

With regard to claims 135 and 142, Paul further discloses determining whether the electronic data relates to undesirable news postings ("pornographic subject matter") such that data having characteristics of undesirable news postings is blocked (col. 9, lines 49-53; col. 6, line 67 – col. 7, line 1).

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With regard to claim 136, Paul further disclosed that appending the determined unique identifier to the electronic message; and forwarding the changed electronic message comprises forwarding the electronic message along with the appended unique identifier (col. 7, lines 3-5, “inserting the word ‘JUNK’ at the beginning of the message’s ‘SUBJECT’ header field”).

With regard to claim 137, Paul further disclosed appending the determined unique identifier as a header to the electronic message (‘SUBJECT’ header field).

With regard to claim 138, Paul further disclosed:

Determining whether the electronic data received from the sender has characteristics of a message to be blocked (col. 6, lines 45-58, describing detecting the “FROM” field, among others); and

Blocking the electronic data when the electronic data is determined to have characteristics of a message to be blocked (col. 6, line 59 – col. 7, line 1, wherein messages from particular senders are marked as “JUNK” and are automatically discarded);

Wherein forwarding at least a selected portion of the changed electronic data comprises forwarding the changed electronic data that is not determined to have characteristics of a message to be blocked (same sections, wherein messages labeled as “JUNK” can still be delivered and are appended with the label “JUNK”).

In considering claim 140, Paul further discloses that determining whether the electronic data has data characteristics of a message to be blocked comprises determining whether the

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electronic data has characteristics of a message to be blocked based upon the determined unique identifier (e.g. "JUNK", col. 6, lines 64-67).

In considering claim 143, Paul further discloses determining whether the electronic data has characteristics of spam ("spam") such that data having characteristics of spam is blocked (col. 6, line 45 – col. 7, line 1).

In considering claim 31, Paul further discloses that identifying the sender includes identifying an initial source that generated the electronic data ("IP address of the sender," col. 5, lines 10-15).

In considering claim 149, Paul further discloses redirecting the received electronic data from the intended recipient to a computing device capable of performing at least the identifying ("e-mail filter 504" and "exclusion list processor 502," col. 8, lines 19-26, 44-60).

In considering claim 150, Paul further discloses changing a destination address associated with the received electronic data from the intended recipient to the computing device (inherent in the process of sending it to the processor and e-mail store).

In considering claims 151-152, Examiner takes Official notice that at the time of Applicant's invention spammers often used fraudulent addresses when sending out spam. Further Paul's system forwards emails with whatever sender email address an email contains.

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Thus, when a spammer is using a fraudulent address Paul's system would forward the fraudulent address.

In considering claims 153-157, 159-163, 165, 167-168, 174-182, 184-188, 190, 192-193, 199-206, 208-212, 214, 216-217, 223-226, these claims are rejected using a similar rationale as the above parallel claims.

1. Claims 133, 139, 141, 158, 164 166, 183, 189, 191, 207, 213, 215, are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul, in view of Venkatachary et al. (U.S. Patent No. 6,212,184, hereinafter "Venkatachary").

In considering claims 133, 139, 141, although the system taught by Paul discloses substantial features of the claimed invention, it does not describe that the intermediary or its components comprise a layer 4 redirection program. Nonetheless, it would be desirable to implement the redirection program on the lowest layer possible, because processing at a lower layer will take less time than processing at the application layer. Furthermore, the use of layer 4 redirection in an e-mail message filtering system is well known, as evidenced by Venkatachary (see col. 6, lines 42-60, and col. 6, lines 16-49, giving an overview of the layer 4 message filtering system). Thus, it would have been obvious to a person having ordinary skill in the art to use layer 4 redirection for the message filtering system taught by Paul, in order to provide a faster message processing system.

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In considering claims 158, 164 166, 183, 189, 191, 207, 213, 215, these claims are rejected using a similar rationale as the above parallel claims.

2. Claims 144-148, 169-173, 194-198, 218-222, are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul, in view of Aronson et al. (U.S. Patent No. 6,654,787, hereinafter "Aronson").

Note that Aronson discloses an e-mail filtering system that can be used in combination with the system taught by Paul (see Aronson, col. 4, lines 45-56).

In considering claim 144, Aronson discloses an additional way to determine whether electronic data has characteristics of spam by counting the number of connections that are made by the sender (col. 5, lines 59-60, "IP source frequency analysis"). Thus, given this knowledge, a person having ordinary skill in the art would have readily recognized the desirability and advantages of determining to block the spam in the system taught by Paul by counting the sender connection frequency, and blocking spam after the frequency rises above a threshold. Such a technique would have been obvious to use to detect spam in the system taught by Paul, because once spam is sent in massive numbers across the Internet, it begins to degrade network performance and clog users' e-mail boxes.

Although Aronson discloses counting connection frequency, it does not describe counting a number of open connections. Nonetheless, Examiner takes official notice that sending spam over open connections, such as over chat rooms or instant messaging applications, is well known in the art. Given this knowledge, it would have been obvious to a person having ordinary skill in the art to use the techniques taught by Aronson and Paul to prevent spamming on chat room

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systems by counting the number of open spam connections, in order to reduce the number of dissatisfied customers who use chat services.

In considering claim 145, it would have been further obvious to allow the frequency analysis taught by Paul and Aronson to be configurable, to allow an administrator to select when he or she thinks a spammer has become dangerous towards the network.

In considering claim 146, Aronson further discloses blocking future electronic data from the sender for at least a period of time when the electronic data is determined to have characteristics of a message to be blocked (col. 6, lines 31-37, describing that filters can last for certain periods of time). Given this teaching, it would have been obvious to a person having ordinary skill in the art to block spammers for only temporary periods of time, to avoid building an unmanageable number of filters (see Aronson, col. 6, lines 39-43).

In considering claim 147, Aronson discloses an additional way to determine whether electronic data has characteristics of spam by counting the number of communications of electronic data that have been received from the sender during a period of time (col. 5, lines 59-60, "IP source frequency analysis"). Thus, given this knowledge, a person having ordinary skill in the art would have readily recognized the desirability and advantages of determining to block the spam in the system taught by Paul by counting the sender communication frequency, and blocking spam after the frequency rises above a threshold. Such a technique would have been obvious to use to detect spam in the system taught by Paul, because once spam is sent in massive

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numbers across the Internet, it begins to degrade network performance and clog users' e-mail boxes.

In considering claim 148, although Aronson does not describe the period of time in great detail (it is simply inherent that the analysis will span some period of time), it would have been obvious to allow the time period to be configurable, so that an administrator could select when he or she thinks is a reasonable period of time in which repeated messages sent by a single sender could constitute spam.

In considering claims 169-173, 194-198, 218-222, these claims are rejected using a similar rationale as the above parallel claims.

Conclusion

2. The prior art made of record, in PTO-892 form, and not relied upon is considered pertinent to applicant's disclosure.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Reilly whose telephone number is 571-272-4228. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 20, 2006


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